

SECTION I—CLAIMS

Amendment to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application. Claims 1, 7-8, and 23 are amended herein. Claims 2, 13, 24, and 29 remain canceled herein without prejudice. New claims 35-38 are presented herein. Claims 1, 3-12, 14-23, 25-28, and 30-38 remain pending in the application.

Listing of Claims:

1. (Currently amended) A computer implemented method comprising:
issuing a plurality of operational descriptors to a controller, wherein the operational descriptors
are issued in a first order and wherein each operational descriptor includes a command, a
memory address identifying a memory location to which a completion status of the
command will be written, and a value to be written upon completion of the command;
and
indicating the completion status of each command ~~commands~~ in a second order, wherein the
second order is different from the first order, and wherein indicating the completion
status of at least one command occurs prior to the completion of the remaining
commands.
2. (Canceled)
3. (Previously presented) The computer implemented method of claim 1 wherein the memory
address included in the operational descriptor is an absolute address.
4. (Previously presented) The computer implemented method of claim 1 wherein the memory
address included in the operational descriptor is an offset from a base memory address.

5. (Previously presented) The computer implemented method of claim 1 wherein each command is stored in a first memory location, and the completion status of each command is written to a second memory location different from the first memory location.
6. (Previously presented) The computer implemented method of claim 1 wherein the commands are grouped into categories, and the completion status of commands in each category are written to different blocks of memory locations.
7. (Currently amended) The computer implemented method of claim 6 wherein the commands are grouped into categories based ~~depending~~ on their execution times.
8. (Currently amended) The computer implemented method of claim 6 wherein the commands are grouped into categories based ~~depending~~ on which of a plurality of resources executes them.
9. (Previously presented) The computer implemented method of claim 6 wherein each block of memory comprises a plurality of memory locations.
10. (Previously presented) The computer implemented method of claim 6 wherein each block of memory comprises a single memory location.
11. (Previously presented) The computer implemented method of claim 1 wherein the value to be written indicates the command's original location.
12. (Previously presented) An article of manufacture, comprising:
a machine-readable medium having instructions stored thereon to:
issue a plurality of operational descriptors from a controller, wherein the operational descriptors are issued in a first order and wherein each operational descriptor includes a command, a memory address identifying a memory location to which a completion status of the command will be written, and a value to be written upon completion of the command;

and

indicate the completion status of commands in a second order, wherein the second order is different from the first order.

13. (Canceled)

14. (Previously presented) The article of manufacture of claim 12 wherein the memory address included in the operational descriptor is an absolute address.

15. (Previously presented) The article of manufacture of claim 12 wherein the memory address included in the operational descriptor is an offset from a base memory address.

16. (Previously presented) The article of manufacture of claim 12 wherein the value to be written indicates the command's original location.

17. (Original) The article of manufacture of claim 12 wherein each command is stored in a first memory location, and the completion status of each command is written to a second memory location different from the first memory location.

18. (Original) The article of manufacture of claim 12 wherein the commands are grouped into categories, and the completion status of commands in each category are written to different blocks of memory locations.

19. (Original) The article of manufacture of claim 18 wherein the commands are grouped into categories depending on their execution times.

20. (Original) The article of manufacture of claim 18 wherein the commands are grouped into categories depending on which of a plurality of resources executes them.

21. (Original) The article of manufacture of claim 18 wherein each block of memory comprises a plurality of memory locations.

22. (Original) The article of manufacture of claim 18 wherein each block of memory comprises a

single memory address.

23. (Currently amended) An apparatus comprising:

a controller to accept a plurality of operational descriptors, wherein the operational descriptors

are issued in a first order and wherein each operational descriptor includes a command, a

memory address identifying a memory location to which a completion status of the

command will be written, an order indicator to enforce execution of commands in a

specific order, and a value to be written upon completion of the command; and

wherein [[a]] the completion status of each command is indicated in a second order, and wherein

the second order is different from the first order.

24. (Canceled)

25. (Original) The apparatus of claim 23 wherein the commands are grouped into categories, and

wherein the completion status of commands in each category are written to different

blocks of memory locations.

26. (Original) The apparatus of claim 25 wherein each block of memory locations comprises a

plurality of memory locations.

27. (Original) The apparatus of claim 25 wherein each block of memory locations comprises a

single memory location.

28. (Previously presented) A system comprising:

a controller to accept a plurality of operational descriptors, wherein the operational descriptors

are issued in a first order and wherein each operational descriptor includes a command, a

memory address identifying a memory location to which a completion status of the

command will be written, and a value to be written upon completion of the command;

a plurality of computational units, wherein the units execute commands from the respective

operational descriptors; and
a memory, wherein a completion status of commands is written to the memory in a second order,
and wherein the second order is different from the first order.

29. (Canceled)

30. (Original) The system of claim 28 wherein the commands are grouped into categories, and
the completion status of commands in each category are written to different blocks of
memory locations.

31. (Original) The system of claim 30 wherein each block of memory locations comprises a
plurality of memory locations.

32. (Original) The system of claim 30 wherein each block of memory locations comprises a
single memory location.

33. (Previously presented) A computer implemented method comprising:
issuing a plurality of operational descriptors to a controller, each operational descriptor
comprising a command; and
initiating executing the commands in a first order; and
indicating a completion status of each command, as each command completes, in the order that it
completes, which is different from the first order.

34. (Previously presented) The computer implemented method of claim 33 wherein each
operational descriptor further comprises a memory address identifying a memory location
to which the completion status for its respective command will be written, and a value
representing the completion status to be written upon completion of its respective
command.

35. (New) The computer implemented method of claim 1 wherein the operational descriptor

further comprises an order indicator to enforce execution of the commands in a specific order.

36. (New) The article of manufacture of claim 12 wherein the operational descriptor further

comprises an order indicator to enforce execution of the commands in a specific order.

37. (New) The system of claim 28 wherein the operational descriptor further comprises an order

indicator to enforce execution of the commands in a specific order.

38. (New) The computer implemented method of claim 33 wherein the operational descriptor

further comprises an order indicator to enforce execution of the commands in a specific order.